Exhibit No. \_\_\_ T (TES-1T) Docket Nos. UE-070804 et al. Witness: Thomas E. Schooley

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant,

**DOCKET NO. UE-070804** 

VS.

AVISTA CORPORATION,

**DOCKET NO. UG-070805** 

Respondent.

In the Matter of the Petition of

AVISTA CORPORATION d/b/a AVISTA UTILITIES,

For an Accounting Order Regarding the Appropriate Treatment of the Net Costs Associated with the Purchase of Debt.

**DOCKET NO. UE-070311** 

### **TESTIMONY OF**

Thomas E. Schooley

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Revenue Allocation and Rate Design, Automatic Meter Reading, and Natural Gas Storage Contracts

October 17, 2007

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1		I. INTRODUCTION.
2		
3	Q.	Please state your name and business address.
4	A.	My name is Thomas E. Schooley. My business address is 1300 S. Evergreen Park
5		Drive Southwest, P.O. Box 47250, Olympia, WA 98504. My email address is
6		tschoole@utc.wa.gov.
7		
8	Q.	By whom are you employed and in what capacity?
9	A.	I am employed by the Washington Utilities and Transportation Commission (the
10		"Commission") as a Regulatory Analyst.
11		
12	Q.	How long have you been employed by the Commission?
13	A.	My employment with the Commission began in September 1991.
14		
15	Q.	What are your professional qualifications?
16	A.	I received a Bachelor of Science degree from Central Washington University in
17		1986. I met the requirements for a double major in Accounting and Business
18		Administration-Finance. Additionally, I have a Bachelor of Science degree in
19		geology from the University of Michigan. I passed the Certified Public Accountant
20		exam in May 1989. Since joining the Commission, I have attended several
21		regulatory accounting courses, including the summer session of the Institute of
22		Public Utilities.

1	I testified in Docket No. UE-960195 involving the merger between
2	Washington Natural Gas Company and Puget Sound Power & Light Company. I
3	was the lead Staff analyst in several applications for accounting treatment, including
4	Puget Sound Energy, Inc. ("Puget") Dockets UE-971619 and UE-991918. I testified
5	in the Avista general rate case, Docket No. UE-991606, and Avista's energy
6	recovery mechanism, Dockets UE-000972, UE-010395, UE-011595, and UE-
7	030751. I also assisted in the development of Staff testimony in Puget's "PRAM 2"
8	case, Docket No. UE-920630, and I presented the Staff recommendation on
9	environmental remediation in Puget Docket No. UE-911476.
10	I analyzed PacifiCorp's proposed accounting treatment of Clean Air Act
11	allowances in Docket No. UE-940947, and participated in meetings of PacifiCorp's
12	inter-jurisdictional task force on allocations. Most recently, I testified in Puget's
13	power cost only rate case, Docket No. UE-031725, and in PacifiCorp's general rate
14	cases, Dockets UE-032065, UE-050684, and UE-061546.
15	I have prepared detailed statistical studies for use by Commissioners and
16	other Commission employees, and have interpreted utility company reports to
17	determine compliance with Commission regulations.

I		II. SCOPE OF TESTIMONY.
2		
3	Q.	Will you please explain the purpose of your testimony in this Docket?
4	A.	I will provide an overview of some of the key issues presented in this case and
5		summarize Staff's resulting recommendations to the Commission concerning the
6		Company's (also referred to herein as "Avista") request for a rate increase.
7		Specifically, my testimony will introduce and briefly address: (i) Staff's
8		determination of the Washington revenue requirement for the Company, and
9		associated rate of return and capital structure issues; (ii) Staff's support of the
10		Settlement Stipulation; and (iii) certain other topics listed below.
11		I will also list the other Staff witnesses and briefly identify the issues that
12		each will address.
13		
14 15		III. WASHINGTON REVENUE REQUIREMENT DETERMINATION AND ASSOCIATED CAPITAL ISSUES.
16		
17	Q.	What revenue requirement did Staff determine for PacifiCorp's Washington
18		operations in this case?
19	A.	Staff calculates an overall increase in the Washington electric revenue requirement
20		for the Company of \$29,442,000 (9.15 percent) and a gas revenue requirement
21		increase of \$3,172,000 (1.6 percent). These determinations and references are
22		summarized in the testimony of Danny P. Kermode. Exhibit Nos T (DPK-1T,
23		2, and 3).
24		

1	Q.	What is the appropriate cost of capital for PacifiCorp?
2	A.	As Staff witness David Parcell explains in detail in his testimony, Exhibit NoT
3		(DCP-1T), the Commission should set rates based on a return on common equity of
4		10.2 percent. The appropriate capital structure includes 45 percent common equity
5		per Mr. Parcell's Exhibit No (DCP-3). Staff witness Kenneth Elgin explains
6		certain adjustments to the costs of the trust preferred securities and debt. Exhibit No
7		T (KLE-1T). Staff witness Danny Kermode summarizes the calculation of the
8		cost of capital in total using the recommended 45 percent equity with the balance of
9		capital being 4.68 percent trust preferred securities, and 50.32 percent long term
10		debt. The result is an overall rate of return of 8.16 percent. Exhibit No (DCP-
11		2).
12		
13		IV. IDENTIFICATION OF STAFF WITNESSES AND SUBJECTS.
14		
15	Q.	Will you please identify the witnesses who will be providing testimony on behalf
16		of Staff?
17	A.	Yes. The following witnesses are submitting testimony as part of the Staff's
18		responsive case:
19		1. Danny Kermode, Exhibit NoT (DPK-1T), testifies to his review of
20		federal income taxes, incentive pay, and customer deposits. Mr. Kermode
21		also testifies to the overall results of operations and Avista's resulting
22		Washington revenue requirement;

1	۷.	Alan Buckley S, Exhibit No1 (APB-11), testimony concerns the
2		prudence of recent generation and transmission acquisitions. Mr. Buckley
3		also presents joint testimony with Don Schoenbeck of the Industrial
4		Customers of Northwest Utilities on power costs;
5	3.	David Parcell, Exhibit NoT (DCP-1T), will testify as to his analysis
6		and conclusions concerning PacifiCorp's cost of equity and capital structure
7		and overall rate of return;
8	4.	Kenneth Elgin, Exhibit NoT (KLE-1T), testifies to adjustments in the
9		determination of the cost of debt;
10	5.	Doug Kilpatrick, Exhibit NoT (DEK-1T), will testify to Avista's
11		demand-side management activities and the rates to recover them;
12	6.	William Weinman, Exhibit NoT (WHW-1T), testifies to accounting
13		adjustments to depreciation rates and wood utility pole expenses;
14	7.	Roland Martin, Exhibit NoT (RCM-1T), testifies to the power cost
15		recover mechanism proposed by Avista;
16	8.	Finally, Thomas Schooley, Exhibit NoT (TES-1T), testifies to revenue
17		allocations, rate design, automatic meter reading devices, and gas storage
18		capacity contracts.
19		

1		V. PARTIAL SETTLEMENT STIPULATION.
2		
3	Q.	Have Avista, Staff, and the other parties reached agreement on some issues in
4		this docket?
5	A.	Yes. Avista, Staff, Public Counsel, and the intervenors have agreed upon certain
6		accounting adjustments, tariff changes for Schedules 91 and 191, and other issues.
7		This agreement was filed as a Partial Settlement Stipulation on October 15, 2007.
8		
9	Q.	Does Staff's testimony incorporate the adjustments in the Partial Settlement
10		Stipulation?
11	A.	Yes. Staff's testimony, and its proposed revenue requirement increase, includes the
12		stipulated adjustments.
13		
14	Q.	Did Staff review the Partial Settlement Stipulation and find it to be in the public
15		interest?
16	A.	Yes. Staff participated in the development of this document, and Staff recommends
17		approval of the Partial Settlement Stipulation as in the public interest.
18		
19		VI. SUMMARY OF TESTIMONY.
20		
21	Q.	Please summarize the results of your investigation.
22	A.	First, I note inadequacies in the Company's data on the allocation of revenues to
23		customer classes. I recommend that Avista conduct new load studies to improve the

1		data necessary to fairly allocate costs to the customer rate schedules and within the
2		rate schedules.
3		Second, with regard to automatic meter reading, I recommend that the
4		Company commence meetings to inform interested parties of updates and progress.
5		Staff recommends no action at this time, and the company is not requesting any
6		action.
7		Finally, I recommend that the Company remove the revenues from release of
8		gas storage and defer them into the 191 account until May 1, 2008, when the
9		capacity reverts back to Avista.
10		
11		VII. REVENUE ALLOCATION AND RATE DESIGN.
12		
13	Q.	Please explain revenue allocation and rate design.
13 14	<b>Q.</b> A.	Please explain revenue allocation and rate design.  Revenue allocation, also known as rate spread, is the process of determining the
14		Revenue allocation, also known as rate spread, is the process of determining the
14 15		Revenue allocation, also known as rate spread, is the process of determining the portion of total revenues to be collected from each rate schedule. Rate design takes
14 15 16		Revenue allocation, also known as rate spread, is the process of determining the portion of total revenues to be collected from each rate schedule. Rate design takes the total revenue for each rate schedule and determines the specific charges within
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>		Revenue allocation, also known as rate spread, is the process of determining the portion of total revenues to be collected from each rate schedule. Rate design takes the total revenue for each rate schedule and determines the specific charges within the schedule, such as the basic charge per month, the demand charge per kilowatt,
14 15 16 17 18		Revenue allocation, also known as rate spread, is the process of determining the portion of total revenues to be collected from each rate schedule. Rate design takes the total revenue for each rate schedule and determines the specific charges within the schedule, such as the basic charge per month, the demand charge per kilowatt,
<ul><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li><li>19</li></ul>	A.	Revenue allocation, also known as rate spread, is the process of determining the portion of total revenues to be collected from each rate schedule. Rate design takes the total revenue for each rate schedule and determines the specific charges within the schedule, such as the basic charge per month, the demand charge per kilowatt, and the exact cents per kilowatt-hour.
14 15 16 17 18 19 20	A. Q.	Revenue allocation, also known as rate spread, is the process of determining the portion of total revenues to be collected from each rate schedule. Rate design takes the total revenue for each rate schedule and determines the specific charges within the schedule, such as the basic charge per month, the demand charge per kilowatt, and the exact cents per kilowatt-hour.  What is the philosophy behind allocating revenues to the rate schedules?

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#### 2 Q. What data are necessary to determine a fair allocation of revenues to the

3 customer classes?

4 A. The utility must collect data on the use of electricity across a broad spectrum of all

> customers. This is known as a load study. While it is not feasible to precisely measure every customer's load, statistical sampling provides sufficient data for the intended purposes. For each customer sampled, the data collected should include, at a minimum, the electricity consumed during short time intervals around the clock and over an entire year. The purpose is to group customers into like patterns of use, to determine the time periods at which those customers demand the greatest amount

> of kilowatts, to compare the peak periods of a group to the lowest use periods within

12 the same group, and to compare each group of customers to the other groups. 13 The utility must also collect data on how the company produces and buys the

15

14

16 Q. Has Avista conducted a recent study of customer usage patterns?

electricity to meet customer needs.

17 A. No. The most recent report is the "1993 Class Demand and Energy Estimates The 18 Washington Water Power Company Final Report," dated December 1994. (1993) 19 Report) And even this study used data from up to a dozen years earlier.

20

<sup>1</sup> Avista Response to Staff Data Request 291.

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2	A.	According to the 1993 Report, the load data for the residential class (Schedule 1) are
3		"based on trending the results of the 1985-86 Residential Class Load Survey," and
4		the data for General Service Schedules 11 and 21 "are based on trending the results
5		from the 1981-82 PURPA survey of the Washington schedule(s)".
6		
7	Q.	Are there other inconsistencies in the load study data?
8	A.	Yes. The irrigation load estimates are "based on borrowed data from Idaho Power"
9		from 1981 to 1982. The street and area lighting load estimates are assumed to be
10		driven solely on the number of hours between sunset and sunrise.
11		
12	Q.	Are any of Avista's electricity schedules based on more contemporary data?
13	A.	Yes. It appears that Schedule 25, Extra Large General Service, is based on 1993 data
14		from demand meters installed for these customers.
15		
16	Q.	Are the rate schedules in effect today the same as those in 1993?
17	A.	No. In 1993, the rate schedules also included an industrial customer Schedule 28
18		and a special pumping contract, neither of which exist today.
19		
20	Q.	How are the above data incorporated into today's cost of service allocations?
21	A.	As I understand it, the patterns of energy use established in the load studies of the
22		1980s remain the same, but have been trended upwards to today's level of
23		consumption. This assumption may not fit the realities of the 21st century.

- 2 Q. What does Staff recommend?
- 3 A. Staff recommends that the Company conduct up-to-date studies of electricity
- 4 consumption across its customer base. Such studies should be developed with the
- 5 involvement of staff and other interested parties. Staff recognizes that the results of
- a new load study will not be available for two to three years or more.

- 8 Q. Earlier you mentioned the need to study the means and methods of electricity
- 9 generation and purchases that meet today's energy and electrical demand.
- 10 Why is that necessary?
- 11 A. The last time this subject was addressed by the Commission was in a Puget Power
- case in the early 1990s.<sup>2</sup> The other utilities have followed the method prescribed in
- that case in subsequent filings. The markets for electricity and natural gas have
- developed substantially since that time and the utilities do not run their systems in
- the same manner as they did 15 plus years ago. It is time for a thorough review of all
- aspects of revenue and cost allocations between customer schedules.

17

- 18 Q. Did Staff also review the Company's proposed rate design?
- 19 A. Yes. The Company's proposed rate design is contained in Company witness Mr.
- 20 Hirschkorn's testimony, Exhibit No. \_\_\_\_ -T (BJH-1T).

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<sup>2</sup> Exhibit No. \_\_\_ (TLK-1), 9:17-18 refers to "the methodology established in Docket No. UE-920499 for Puget Sound Power and Light (now PSE)."

1	Q.	Please describe the basics of rate design.
2	A.	Rate design concerns the various elements within a rate schedule. These elements
3		include the monthly basic charge, demand charges, reactive power charges, and
4		energy charges.
5		
6	Q.	Does Staff accept the Company's proposed changes to the current rate
7		schedules?
8	A.	No. The elements of rate design are based on the allocation of costs to the schedule
9		and suffer from the same lack of current data as does the cost of serving the customer
10		on the rate schedule. There is little factual basis for determining a fair charge for any
11		one element of the rate schedule.
12		
13	Q.	What is Staff's rate design recommendation?
14	A.	Staff recommends there be no changes to basic or demand charges without specific
15		data to support such changes. Therefore, should the Commission find a revenue
16		increase that is appropriate, it should be applied only to the energy charge.
17		
18	Q.	Is there an exception to this general recommendation?
19	A.	Yes. The Industrial Customers of Northwest Utilities proposes increases to the
20		Primary Voltage Discount and a third energy block within Schedule 25, Extra Large
21		General Service. Staff does not oppose this proposal.
22		

1		VIII. AUTOMATIC METER READING.
2	Q.	Please describe Avista's testimony on implementing automatic meter reading
3		devices.
4	A.	Avista presents a range of options it may pursue to install automatic meter reading
5		devices for gas and electric customers. The Company, however, does not seek any
6		cost recovery in this filing, stating that this testimony is "for informational purposes
7		only." Exhibit NoT (HLC-1T) at 2.
8		
9	Q.	What is Staff's response?
10	A.	Staff suggests that the Company present greater details on the metering options
11		available to interested parties in future meetings. No Commission action is required
12		at this time.
13		
14		IX. CASCADE & TERASEN CAPACITY RELEASES.
15		
16	Q.	Please describe the Cascade capacity release listed as Adjustment PF4, Pro
17		Forma Storage Contract.
18	A.	Since 1990, Cascade Natural Gas has "rented" gas storage space from Avista at
19		Jackson Prairie. Cascade's payment for this storage was about \$650,000 per year of
20		which \$478,000 was Washington's share. This revenue has been included as a
21		reduction to Washington rates since 1998. Prior to then, the revenue reduced gas
22		costs in the Purchased Gas Adjustment (PGA). Per the terms of the contract Avista
23		gave notice to Cascade that it wanted the storage capacity back and terminated the

1	contract as of May 1, 2007. The benefits of the additional storage at Jackson Prairie,
2	plus some associated pipeline capacity, have been available to Avista since that time.
3	These benefits are reflected in the PGA. However, as general rates include the now
4	foregone revenues from Cascade, Avista proposes an adjustment to remove the
5	revenue received during the test year. <sup>3</sup> Avista also has posted a monthly charge of
6	\$39,833 to the PGA deferrals since the beginning of May to offset the revenues
7	included in general rates.

## Q. Does staff accept this treatment of the Cascade capacity release?

10 A. Yes.

# Q. Please describe the Terasen capacity release.

A. This situation is similar to the Cascade capacity release described above. Terasen is the natural gas company formerly known as BC Gas. Avista released, that is rented, capacity at Jackson Prairie to Terasen many years ago and the revenues from this contract are included in general rates, reducing base rates. Avista has given Terasen proper contractual notice and is recalling this capacity as of May 1, 2008. Staff proposes to move the Terasen revenues to the PGA as of the effective date of the present docket. The effect is to increase general rates by \$1,757,000. This is offset by a commensurate reduction to the PGA of about \$140,000 per month for each month between the effective date of this docket and May 2008. This forward looking treatment assures that both the customers and the Company receive the

<sup>&</sup>lt;sup>3</sup> Exhibit No. \_\_\_\_(EMA-3) at 8, column PF4, Pro Forma Storage Contract.

1		benefits of the revenue from the Terasen contract while it is in effect and the benefits
2		of the extra capacity when it is made available.
3		
4	Q.	The Partial Settlement Stipulation states a specific allocation of the increase to
5		base rates due to the removal of the Terasen revenues. Does Staff accept this
6		treatment?
7	A.	Yes. The objective is to allocate the increase to base rates in the same manner as the
8		revenues from the contract were allocated in rates. This is accomplished by the
9		treatment described in the Partial Settlement Stipulation.
10		
11	Q.	Does this conclude your testimony?
12	A.	Yes.